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AGRICULTURE and TRADE of EL SALVADOR

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ABSTRACT

Agricultural production in El Salvador has been increasing, but at a rate slower than population. The principal export crops--coffee, cotton, and sugar--have benefited most from improved technology and from attention to marketing by cooperative organizations. Increased corn production has resulted from many years of research and extension work with local farmers. Wheat is the country's chief agricultural import.

El Salvador is an important source of coffee beans and sugar for the United States, which in turn is El Salvador's prime source for wheat. Western Europe, Japan, and the Central American Common Market are important trading partners of El Salvador.

Key Words: El Salvador, population density, economic indicators, agricultural policies, land reform, food requirements.

PREFACE

This report updates the out-of-print ERS-Foreign 49--El Salvador--Its Agriculture and Trade. The author relied heavily on reports from the U.S. Embassy in El Salvador, particularly those from the Agricultural Attache, Stanley Phillips. Reports from the Embassy Economic Section and the Agency for International Development were also very useful.

Washington, D.C. 20250 November 1971

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1 square kilometer = 0.386 square mile

1 kilometer = 0.6214 mile

1 meter = 3.28 feet

Degrees centigrade = 5/9 (degrees F. -32)

1 millimeter = 0.03937 inch

1 hectare = 2.471 acres

1 manzana = 1.73 acres

All tons are metric.

SUMMARY

El Salvador's world trade now amounts to more than $200 million in both imports and exports. Agricultural products account for two-thirds of total export value and 15 to 18 percent of total imports. The trend in agriculture's share of trade has been down for exports but up for imports.

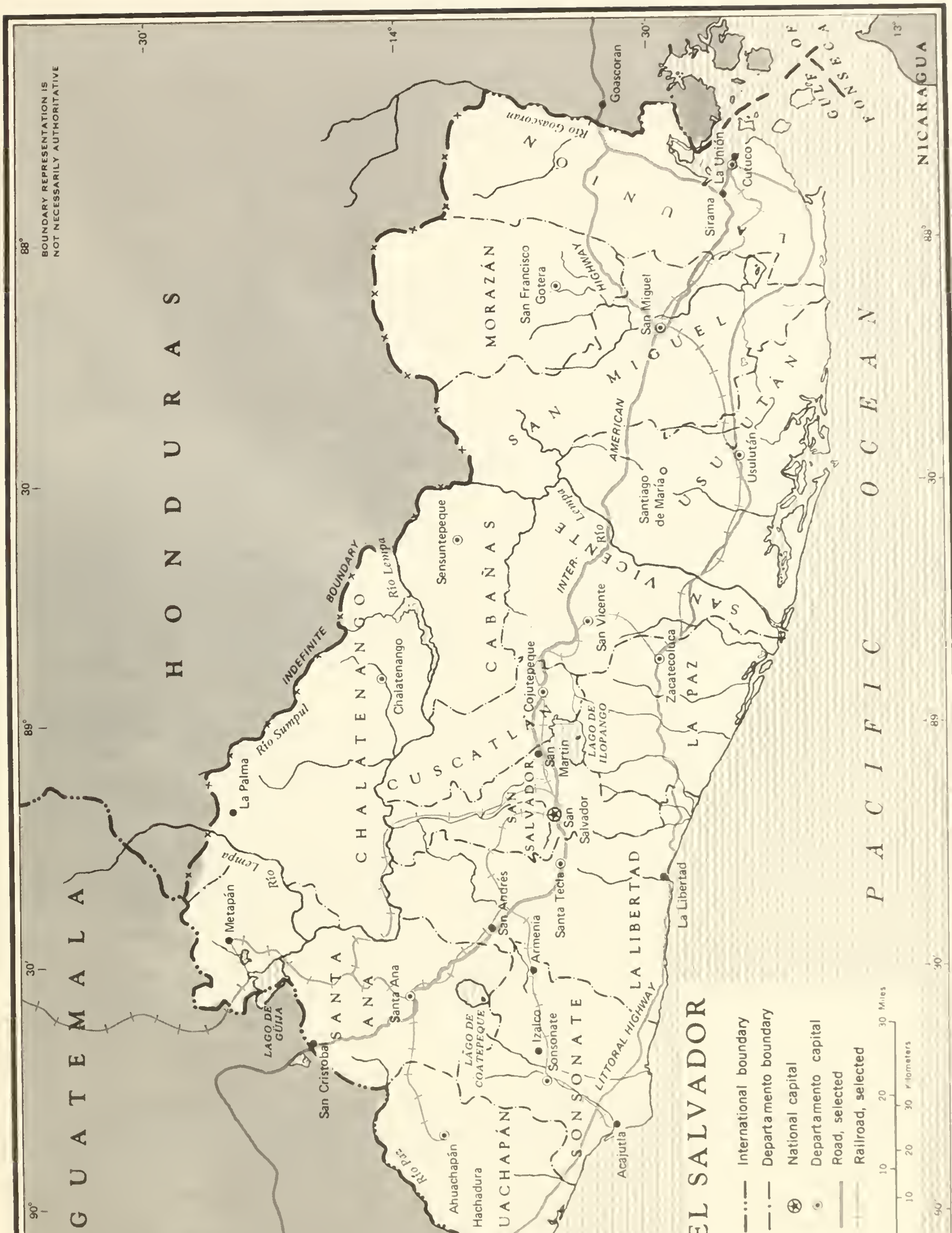
Wheat is El Salvador's most important agricultural import from the United States. For the immediate future, wheat imports most likely will continue upward. The market for U.S. tallow will probably continue at about the present level.

El Salvador's total agricultural output during 1961-70 increased at an average rate lower than population increase. However, food production increased at a higher rate than population increase.

Average daily per capita food consumption may have improved some since 1966, when intake was estimated at 1,840 calories, well behind the rest of Central America. However, current consumption is probably still well below the accepted minimum standard for this part of the world of 2,450 calories.

Government policy continues to stress the need for improvement in farming practices. Efforts to improve the domestic supply of foodstuffs continue. Some progress has been made in reclaiming land for agricultural use and marginal cotton lands have sharply shifted into food crops, particularly corn.

Development of the Central American Common Market (CACM) was set back when armed conflict between El Salvador and Honduras broke out in mid-1969. Although the conflict is now reduced to occasional border incidents, the disruption to intra-CACM trade continues. El Salvador formerly imported significant amounts of food products from Honduras, including cattle and hogs for slaughter. These products are now being procured elsewhere or are available from increased domestic output.



EL SALVADOR

U.S. DEPARTMENT OF AGRICULTURE

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AGRICULTURE AND TRADE OF EL SALVADOR

By

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RESOURCES

Among El Salvador's most valuable resources are its fertile volcanic soil which produces the country's chief crop, coffee; its subtropical climate which makes possible the production of more than one crop per year of some grains; and its available labor supply.

Physical Features

El Salvador is the smallest of the six Central American republics; the total land area is about 21,394 square kilometers. Its maximum length is 257 kilometers and its average width is 97 kilometers.

Two mountain ranges cross the country from west to east, cradling a region of plateaus broken by numerous river valleys. The plateau area is devoted to intensive general farming, particularly of crops for domestic consumption. Also, at least three-fourths of the people live there. The range of mountains nearest the coast is marked by a series of volcanoes whose eruptions through the years have built up the deep, porous soils that produce El Salvador's famous coffee. The coastal areas are devoted to the production of cotton, sugarcane, coconuts, and food crops.

Earthquakes are frequent and while most tremors are minor, sometimes serious damage occurs. The last severe quake was in May 1965, when San Salvador and environs were hit by a quake which caused much damage, mostly between the city and Lake Ilopango. It occurred over a fault line running through the north-central part of the city and extending eastward to Lake Ilopango and westward to San Salvador Volcano.

The Lempa is the country's largest river and the source of irrigation water and much of the hydroelectric power. Rising in Guatemala, it crosses a corner of Honduras and enters El Salvador in the northwest, then turns east and finally south before it empties into the Pacific. Many rivers empty into the Lempa. A few short rivers rise in the coastal range and flow directly into the Pacific.

There are a number of lakes in El Salvador; the largest are Guija, located on the Guatemalan border; Coatepeque, in the western part of the country; and Ilopango, near San Salvador.

Climate

Although El Salvador is well within the tropics, the heat is tempered by the over-610-meter elevation of much of the country. Daytime temperatures generally are warm rather than tropically hot, and the nights are cool.

Average temperatures recorded at five meteorological stations with elevations of 30 to 945 meters ranged from 21° C. to 27° C. (1). [1] Plantation owners in the coastal lowlands have noted temperature extremes ranging from 20° C. to 43° C. In the highlands, at elevations of 1,006 to 1,494 meters, extremes of 0° to 25° C. have been reported.

There are two distinct seasons, the wet and the dry, which exist throughout the country. The rainy season begins in May and lasts through October. Rainfall data of the National Meteorological Service collected at 13 selected stations throughout the country showed a range of 1,536 mm. to 2,269 mm. The almost complete lack of rainfall during the other 6 months has a decided effect on crop and dairy production.

Land Use and Tenure

A high percentage of El Salvador's total area is used for agriculture. Between 1950 and 1961, the area in farmholdings increased slightly, from 72 percent of the total land area of the country to 74 percent (table 1). [2] The number of farms increased from 174,204 to 226,896, but the average size of farms dropped from 8.8 to 7.0 hectares. Farmland per capita was about 0.6 hectare in 1969 and has most likely dropped to less than 0.5 hectare at present.

Cultivated cropland and fallow made up about 31 percent of the total area in farmholdings in 1961. Coffee, cocoa, and other tree crops occupied 10 percent of the area; improved pastures, 7 percent; and rough mountain land and forests, 14 percent. Native range; nonagricultural land occupied by clusters of homes, stables, corrals, swamps, and roads; and other nonagricultural land accounted for the remaining 38 percent.

Most of the land is privately owned and is farmed by owners or tenants. Holdings range in size from plantations of several thousand hectares to plots of 0.2 hectare or less. Comparison of census data indicates that the number of very small farms is proliferating, and that the number of very large farms has declined. In 1961, 47 percent of the farms were less than 1 hectare in size, compared with 40 percent in 1950. Farms of 50 hectares and up increased from 4,133 in 1950 to 4,362 in 1961. However, the number of farms in the largest size group--1,000 hectares or more--decreased from 145 in 1950 to 125 in 1961.

The large farms, encompassing the best land in the country, are owned by wealthy families and are passed down from one generation to another. Small-scale independent landowners and the many landless workers make up the agricultural labor force. Laborers farm plots of land as squatters or under arrangements with the owner, usually producing enough of the basic foods for their families. Many spend a great deal of time as migrant farmworkers.

Population

El Salvador is one of the most densely populated countries of the Western Hemisphere. The density of persons per square kilometer in 1969 was 155, up from 123 in 1962. This compared with 1969 densities of 303 in Puerto Rico, 185 in Haiti, and 171 in Jamaica.

The estimated population in 1969 was 3,314,000 (table 2), making El Salvador second among the six Central American nations in total population. The annual rate of increase continues at about 3.4 percent, even though various family planning programs are in operation.

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[1] Underscored numbers in parentheses refer to items in the Bibliography.

[2] Tables are grouped at the end of the report.

Population growth is El Salvador's most pressing problem. Unemployment and underemployment are high, since the population is increasing faster than the availability of jobs. Unemployment is estimated at between 5 and 20 percent on a seasonal basis. Peak employment occurs during the coffee/cotton/sugar harvesting season from November through February.

About 40 percent of the population is classed as urban, and there is an accelerating drift toward urban centers. Urban population is projected at 44 percent by 1984 (2). In the past, population pressure was relieved somewhat by migration of Salvadorans to neighboring countries, particularly Honduras.

ECONOMIC TRENDS

Agriculture remains a major factor in El Salvador's economy, even though the country's relatively high degree of industrialization is increasing. Agriculture's contribution to gross domestic product dropped from 32 percent in 1960 to about 26 percent in 1967 and most likely remains at that level. The proportion of agricultural products in total exports dropped from 85 percent in 1960-64 to 66 percent in 1968.

During 1960-69, the economy grew at an average compound rate of 6.8 percent. Rising production and exports of coffee and cotton during the early years of the decade, and mounting exports of industrial products to the CACM contributed to this growth. In 1966, the export value of both coffee and cotton dropped because of lower 1965 harvests and falling world prices, and a 3-year slowdown in growth began. Record agricultural production in 1969 contributed to an improved situation in that year and 1970 saw further improvement.

The share of the manufacturing industry in gross domestic product increased from 16.4 percent in 1960 to 19.5 percent in 1967. Central Bank statistics indicate that the percentage reached 19.6 in 1969, despite a temporary disruption of intra-CACM trade resulting from armed conflict between El Salvador and Honduras.

In 1969, the Salvadoran Legislative Assembly approved a series of development projects whereby loans from foreign sources could be utilized, thus giving the economy a boost. Also, consideration of trade arrangements with non-CACM countries was begun because of near saturation of the CACM with Salvadoran products and restrictive measures adopted by some CACM members against these products.

FACTORS AFFECTING AGRICULTURAL PRODUCTION

Among the factors affecting agricultural production in El Salvador are: its small size and the large percentage of its total area already devoted to agriculture, transportation and storage facilities, availability of credit, agrarian reform, production practices, agricultural policies, and domestic demand for food and other farm products. Area and land use have already been discussed.

Transportation

El Salvador is served (1968) by 8,626 kilometers of roads, of which just under half are all-weather; 756 kilometers of narrow-gauge, public-service railroads; three seaports; and one international airport.

El Salvador's highway system is built around two main east-west routes. These are the Interamerican Highway, with a total length of 307 kilometers running from San Cristobal on the Guatemalan border to Goascoran on the border with Honduras; and the

Littoral Highway, running from La Hachadura on the Guatemalan border to Sirama near the Gulf of Fonseca--a total distance of 294 kilometers (3).

The Interamerican Highway passes through three of El Salvador's most important cities--Santa Ana, San Salvador, and San Miguel. The Littoral Highway opens up some of the country's most productive agricultural areas and links the three seaports, Acajutla, La Libertad, and La Union. Roads branching off from these two main highways reach almost all sections of the country, greatly facilitating the distribution of farm commodities within the country and providing quick access to the ports for export commodities. However, an area in the north-central part of the country, comprising parts of the Departments of Cabanas, San Vicente, and San Miguel, is almost entirely without highway service.

The International Railways of Central America (IRCA) operates 459 kilometers of rail lines and by connecting with its Guatemalan Division, it provides access for El Salvador to Puerto Barrios on the Caribbean. Since 1966, the Salvador Railway (Ferrocarril de El Salvador--FES) has been managed and operated by the same Government agency that operates the port of Acajutla. In 1966, a 19-year, $10.8 million modernization program for FES was announced.

El Salvador depends greatly upon maritime transportation, which is provided entirely by foreign fleets. Acajutla has become the leading port in Central America since being modernized some years ago and put under the management of a Government agency, CEPA (Comision Ejecutiva del Puerto de Acajutla). CEPA also administers the port of La Libertad.

The international airport, Ilopango, is situated about 6 miles east of San Salvador, near the Interamerican Highway. It was opened to jet aircraft in May 1964. Regular flights are available to the capitals of the other CACM countries and to certain other cities also. Until the difficulties between El Salvador and Honduras are settled, direct flights between those countries are canceled.

Storage Facilities

Warehouse storage facilities are available at the three ports. Marketing and storage services for coffee, cotton, and sugar are also offered by producer cooperatives. Processing and marketing of these commodities are carried out with great efficiency.

Storage facilities for seed cotton, baled cotton fiber, and cottonseed are maintained at cotton gins. Bagged coffee is stored at beneficios (processing plants), and storage space at the ports is supplied by the transportation companies at very nominal rates.

In contrast, storage for basic grains--corn, rice, beans, and sorghum--is far from adequate, both on-farm and commercial. An estimated 20,700 tons of additional grain storage is needed to supplement the current off-farm capacity of 35,300 tons. This continuing lack of off-farm as well as on-farm storage results in considerable product and resource loss and is a major obstacle to more stable prices and more adequate supplies of basic grains.

Credit

Credit supply institutions in El Salvador include cooperatives, producer associations, the Mortgage Bank, the Federation of Credit Boards and its affiliates, the Rural Credit Boards, the supervised credit agency (ABC--Administracion de Bienestar Campesino), commercial banks,and the Government.

Large agricultural operators have long had access to credit through cooperatives and producer associations, such as the Salvador Coffee Company, the Salvador Cotton Cooperative, and the Association of Sugar Producers. Until the early 1960's, small producers had very limited access to credit on terms that they could meet.

The credit operations of the Mortgage Bank consist of long-term mortgage loans. The function of the Federation of Credit Boards (created February 1943) and the Rural Credit Boards is to protect and improve the status of small producers and to develop credit by cooperative organization.

In December 1961, the Government, in line with its policy of improving the lot of farm labor and small producers, established the ABC. For a start, ABC used funds from the sale of U.S. wheat purchased under Title IV of Public Law 480. Loans were limited to farmers owning less than 20 hectares of land. Later, funds were obtained through loans from the Agency for International Development (AID), loans and grants from the Government of El Salvador, and loans from the Central Bank.

ABC assists farmers who cannot obtain credit from other sources. An executive decree of August 1968 eliminated the maximum size unit (20 hectares) that can be financed as well as the requirement that the borrower must live on and operate his unit. From the first full year of its operation, 1962, through September 1969, ABC had made 31,531 loans totaling $16.5 million.

A 10-percent sample of ABC borrowers taken in 1965 indicated substantial increases in production of both crops and livestock following credit extension. The total gross value of all agricultural products of farmers sampled increased by 96 percent. The average size of units farmed increased 23 percent. Net income per manzana increased 49 percent, and gross income, 86 percent.

In addition to ABC, there are Government-sponsored programs for administering foreign loans for improving the livestock industry and for irrigation and drainage.

Agrarian Reform

El Salvador's agrarian reform program is implemented by the Rural Colonization Institute (ICR), whose purpose is to improve the distribution of land by subdividing large estates and by parceling out public lands or idle lands to rural people who have no land. In addition, it is supposed to provide the settlers with technical guidance, housing, medical aid, credit, and access roads to the parcels distributed (4).

In 1962, the ICR was administering 31 large estates with a total area of 39,525 hectares or an average of 1,275 hectares each. Of this area, over 30,000 hectares had been divided among 5,860 families, indicating farm units of around 5 hectares each (4).

In 1967, there were about 30 agricultural colonies which together had a population of over 60,000 and occupied a total of 50,036 hectares (5). Several of these colonies are in the Zapotitan Valley project, which includes some 4,452 hectares and is El Salvador's first large reclamation project.

The 1968-72 Five-Year Development Plan calls for the expenditure of $4.8 million for building roads, drainage canals, and irrigation facilities for the development of the Zapotitan project. However, the plan makes no provision for financing distribution of water to the farms or for planning of cropping practices which will allow full utilization of water resources.

Because of the scarcity of undeveloped public lands to distribute, certain other measures have been taken for the betterment of small farmers and farmworkers. One of these is the supervised agricultural credit program already discussed. Laws for the protection of farmworkers include the establishment of a mandatory weekly day of rest with pay and the detailing of working conditions. Reorganization of the Salvador Coffee Company resulted in its easing credit procedures for small coffee producers.

Production Practices

Much of El Salvador's agricultural output is achieved through crude production methods. But most crops for export are produced through modern, efficient farming methods.

Mechanization.--Cotton is produced with the aid of modern farming techniques. The level coastal areas where cotton is produced are eminently suited to mechanization, and most of the holdings are large enough to make this practical. Only thinning, late weeding, and harvesting are done by hand on the large farms (6). The small farms, in contrast, use oxen for power; cultivation, spraying, picking, and other operations are done by hand.

The annual report of the Ministry of Agriculture for 1967/68 indicates that, for the cotton crop that year, 96 percent of the land preparation was done with mechanical power and 4 percent with oxen power (7). Fifty-seven percent of the seeding was done with mechanical power and 43 percent with oxen. The largest area of land prepared and seeded with mechanical equipment was on farms in the 70- to 350-hectare size range.

Coffee production mostly depends on manual labor, as the steep terrain and the presence of shade trees make the use of machinery difficult. Weeding and picking are done by hand and--except to a very limited degree--preparation of the soil and planting are also manual operations.

The coffee industry is the largest employer in El Salvador. Between harvests, an estimated 300,000 persons--about 30 percent of the labor force--are working in the industry, and at harvesttime, double that. Even then, this probably does not include women and children, who do a large part of the picking.

Sugarcane is produced on both large and small farms. The larger plantations are quite thoroughly mechanized. These produce the raw sugar that is exported or refined for domestic consumption. On small farms, sugarcane is cultivated along with other food crops and is used to make the crude brown sugar known as panela.

Conservation.--Most owners and operators of small as well as large farms manage their land with a sense of responsiblity for conservation of natural resources. Besides the good management practices that are traditional with coffee, cotton, and sugar production, crop rotation, terracing, and fertilization are generally practiced. While there is burning of crop residues, uncontrolled burning is no longer widespread. Some erosion still results where corn and sorghum are planted on very steep hillsides.

Fertilizer use.--Consumption of chemical fertilizer is generally trending upward. Use was estimated at 61,500 tons of nutrient equivalent in 1969/70, triple the quantity used a decade earlier (table 3). Export crops receive the bulk of the fertilizer used. Its use on cotton farms continues to expand, but there is no set pattern as to how much, what kind, or when (6).

Fertilizer use on corn was stimulated greatly by mass demonstrations begun in 1965 under USAID sponsorship. This expanded use of fertilizer, along with increased acreage available from cutbacks in cotton area, resulted in sharply increased corn production, an excess over available storage capacity, and a decline in corn prices.

Irrigation.--Dry season irrigation has been practiced for many years but on a limited scale. In the 1961 census, irrigation was used on 3,254 farms--slightly more than 1 percent of all farms. The area under irrigation comprised 14,592 hectares--less than 1 percent of total agricultural land. This irrigated area was situated mostly on the Pacific coastal plain, where water resources are relatively ample. However, since 1961, more land has been brought under irrigation through development and agrarian reform projects such as the Zapotitan Valley project.

Agricultural Policies

Policies for the development of agriculture are formulated by the Ministry of Agriculture and are largely put into practice through efforts of the various producer associations and cooperatives, the Extension Service, and financial institutions. El Salvador's general agricultural policies continue to be twofold: (1) to expand production of basic food crops to feed the rapidly growing population; and (2) to improve living conditions for the thousands of small farmers whose farms are less than 1 hectare in size.

Despite diversification efforts, El Salvador is still largely a one-crop (coffee) economy. The land reclamation projects, such as the Zapotitan Valley and others being planned, are aimed at making more land available to small farmers, thereby boosting food crop production. A supervised agricultural credit program and a livestock improvement program are also part of the Government's policies for expanded food production and for assistance to the small farmer.

Salvadoran Government, other government, and private technical assistance programs are directed toward improvement of farm practices that result in better yields. The results of the mass fertilizer demonstrations prove how effective such programs can be. It has been a problem finding and keeping enough qualified technicians to carry out the programs.

The Extension Service evolved from an agricultural research program initiated cooperatively in 1942 by the El Salvador Government and the U.S. Department of Agriculture. Extension work, as such, was started in 1948 and grew steadily until in 1956 there was an agent in each of the 14 Departments of the country plus one or two subagents in some Departments. During 1964 and 1965, it was expanded to 100 technicians and 50 field offices, but there has been no further growth. The effectiveness of extension efforts is limited by lack of financial support by the Government, high turnover of employees, and lack of transportation vehicles. Without increased Government support there will be no expansion in extension work.

Agricultural research activities are carried out at the main research center, Santa Tecla, near San Salvador. There is also an experiment station at San Andres which operates in conjunction with the National School of Agriculture.

The producer associations, marketing cooperatives, and other organizations which implement Government policy for the major export crops are discussed in the sections on these commodities.

Domestic Consumption

Food consumption per capita in El Salvador is among the lowest in Latin America. Average daily per capita consumption was estimated at 1,840 calories in 1966, compared with 2,060 calories in 1963-65 (table 4).

Average daily per capita consumption of protein in 1966 of 44 grams was below the reference standard of 60 grams (8). Consumption of fat at 36 grams was below the reference standard of 42 grams.

The basic foods of the rural people are corn, rice, beans, and grain sorghum. These, plus wheat, account for more than half of available calories. Production of the basic foods has generally been inching upward and the index of total food production in 1970 was an estimated 34 percent above the 1961-65 base period (table 5).

On a per capita basis, food production in 1961-70 exceeded the base period in 6 years, and fell below the base period the rest of the time. Despite gains in food crop production, El Salvador is still not self-sufficient in some food grains. The 1969 corn crop was a record one (table 6), but 10,800 tons were imported in calendar year 1969. In recent years, El Salvador has been a net exporter of rice but a net importer of beans, an important source of protein.

Based on uncertain statistics, it appears that per capita output of livestock products is lagging behind population growth. Domestic demand for the three major export commodities--coffee, cotton, and sugar--is increasing along with population, living standards, and tourism.

CROP AND LIVESTOCK PRODUCTION

El Salvador's agricultural economy is dominated by export crops. Crops and livestock products for domestic consumption are also important in the economy.

Export Crops

Coffee remains El Salvador's number one export commodity. It occupies the second largest area of land, exceeded only by corn, and in 1968 accounted for 44 percent of all exports (table 7).

From a small beginning over 100 years ago, coffee has forged ahead, replacing indigo, balsam, and cocoa as the basis of the country's economy. It is grown in all parts of the country on the rugged uplands where no other crop would produce as well in terms of either volume or value.

Coffee is produced on farms in every size range, from those 2,500 hectares and over down to very small farms of 1 hectare. According to the 1961 census, 36,538 farms were producing coffee, with an average of 4 hectares planted to coffee trees. However, farms in the 20- to 2,500-hectare size range, representing 10 percent of all coffee farms, produced more than 80 percent of the crop.

Producer and other organizations have a key role in the coffee industry. One of the first and most influential is the Coffee Grower's Association (Asociacion Cafetalera de El Salvador), to which most of the commercial planters belong. Its purpose is to identify and solve problems of producers relative to production, distribution, and consumption of coffee.

The Salvador Coffee Company (Compania Salvadorena del Cafe), originally organized and owned by large coffee growers and exporters, was restructured by the Government in 1963 to give small growers a greater voice in the affairs of the company. Functions of the company are to provide short-term credit to producers and to buy, process, and export coffee.

The Salvadoran Institute for Coffee Research (Instituto Salvadoreno de Investigaciones del Cafe) is in charge of all research work on coffee. Projects emphasized are those aimed at increasing coffee yields, improving quality of coffee, and developing new coffee products. With ever-present coffee surpluses threatening to become a problem, the institute is now conducting studies on the feasibility and means of putting marginal coffee lands into the production of other crops.

Regulation of the coffee industry is performed by still another organization, the National Coffee Department (Departamento Nacional del Cafe), which is the chief policy-making body for coffee matters, and implements all coffee agreements.

Coffee production continues to increase despite surpluses, marketing problems, and various credit restrictions and other measures aimed at discouraging the planting of coffee trees. Output in 1965 was 109,000 tons--equal to the 1960-64 average. In 3 of the next 4 years, production continued to rise, reaching an all-time high of 150,000 tons in 1969. This was achieved by a combination of ideal weather and extra care in harvesting and processing the crop in response to rising prices. Output in 1970 was 120,000 tons, indicating that the traditional up-and-down cycle in coffee production has not yet been entirely neutralized by improved technology.

A crop diversification study initiated in 1967 with assistance from the Special Fund of the United Nations is scheduled for completion in 1971. This study looks particularly at the feasibility of substituting fruit and other tree crops for coffee in marginal areas.

For the next few years, coffee production will most likely continue the pattern of the past. The up-and-down cycle may be increasingly modified by technology, but the greatest influence will continue to be weather.

Cotton.--Though far behind coffee, cotton is El Salvador's second ranking export crop. In 1967, not a good year for cotton, exports of fiber, waste, seed, oil, and other cotton products accounted for 14 percent of the value of agricultural exports. This contrasts with 28 percent in 1965, a record year for cotton exports.

Cotton is grown mainly in the fertile coastal plains and river valleys of seven of El Salvador's 14 Departments. Usulutan leads with about one-third of total planted area.

Yields per hectare compare favorably with those in neighboring countries and exceed the U.S. average. In 1964-68 yields averaged 754 kilograms of fiber per hectare, compared with 788 in Guatemala, 757 in Nicaragua, and 565 in the U.S.

High yields are achieved and maintained at fairly high cost as prices of fertilizer, labor, insect control, and other inputs increase. Mounting costs have eliminated some of the more inefficient producers and have caused some marginal lands to be returned to grains and pasture.

The cotton industry is closely regulated by the Cotton Cooperative (Cooperativa Algodonera Salvadorena Ltda.). All cotton producers are required to hold membership, and the cooperative is the only ginner and purchaser in the country. The co-op also provides treated seed for planting, fertilizers, and insecticides, but producers are not required to use these (6). The co-op promotes such improved practices as disease and insect control, fertilization, and soil conservation.

Cotton output dropped sharply from an all-time high of 82,000 tons in 1964 to 35,000 tons in 1967. A succession of years of adverse weather along with a large build-up of insect populations served to reduce harvested area and yield. However, in 1968 and 1969, conditions improved and production expanded to 45,000 tons. By 1970, production had increased to 54,000 tons. It is likely that for the immediate future, production will be responsive to fluctuation in the level of international cotton prices.

Sugar.--Although no other crop grown in El Salvador can compare closely with coffee and cotton in commercial value, sugarcane is still of considerable importance. Raw centrifugal sugar is milled from cane and exported, principally to the United

States. Panela, described as "solidified cane juice," is widely produced by home industries and is more popular than refined sugar among rural consumers (9). Molasses, a byproduct of cane milling, is used in animal feed and for making alcohol.

Sugarcane is produced in all Departments, but commercial production is concentrated in the western part of the country. Currently, there are 17 active mills. The planters and mill owners are represented by the Sugar Producers' Association (Asociacion de Azucareros de El Salvador). Membership is open to growers whose cane goes into centrifugal sugar. The association is a lobby group which represents the interests of growers with respect to legislation.

The sugar industry is regulated by two other influential organizations. The cooperative marketing organization (Cooperativa Azucerera de El Salvador) handles sugar marketing and refining. The refinery established by the cooperative refines local sugar for domestic consumption and small quantities for export.

The Sugar Industry Defense Commission (Comision de Defensa de la Industria Azucarera) protects the sugar industry by setting the maximum wholesale prices of sugar, establishing production quotas for domestic consumption, and issuing export licenses for sugar and import licenses for machinery for the sugar industry.

Output of sugar is being increased by more efficient operation of the mills and better production practices by cane growers. The estimated area of cane cut for centrifugal sugar in 1970 was 15,000 hectares, down slightly from 1969 but up markedly from the 9,000 hectares harvested in 1960-64. Production was estimated at 117,000 tons, an increase of 7 percent over 1969.

Domestic consumption is increasing for several reasons--the soaring population increase; rising living standards which permit the use of refined sugar in place of panela; and increasing consumption by the processed food and beverage industries. Consumption rose from 48,615 tons in 1960-64 (9) to an estimated 69,000 tons in 1970. Per capita consumption increased from 18.5 to 20.1 kilograms.

The Five-Year Plan for Agricultural Development projects the area of cane cut for centrifugal sugar at near the current level through 1972 and production at 128,000 to 131,000 tons (10). Per capita consumption, including that used industrially, is projected to reach 22.5 kilograms. The projected 1972 production level would be adequate to meet the present U.S. quota (38,529 tons as of November 1971) with small amounts still left for markets other than the United States or for reserve stocks.

Crops for Domestic Consumption

Corn, beans, rice, and sorghum are the basic foods of most of the people and the combined value of these crops is second only to that of coffee. Besides these basic foods, El Salvador produces a variety of fruits and vegetables, oilseeds, and fiber crops.

Corn is grown throughout the country, on good land and poor, on hillsides and flatlands. Production in 1969 reached an all-time high of 279,000 tons produced on 194,000 hectares. Preliminary data indicate that the 1970 crop was much more outstanding--330,000 tons. Good weather and a further increase in the use of improved seed contributed to these excellent yields.

For the next several years, provided current interest in corn planting is maintained, El Salvador's imports of corn could be less than in recent years.

With U.S. technical assistance, research into the development of better varieties of corn began in 1943. For about 16 years, work has been carried on in collaboration with the Rockefeller Foundation's International Maize and Wheat Improvement Center in Mexico. Two very popular corn hybrids were developed and are now widely planted throughout the country.

Beans are usually interplanted with corn throughout the country. The 1969 crop reached 26,000 tons, a level not previously attained. Because of the armed conflict with Honduras, the Ministry of Agriculture undertook a crash program to increase plantings of the main bean crop. Growing conditions were excellent and extension agents worked hard to promote better cultural practices. Succeeding crops also yielded well, contributing to the record output. Another record crop was produced in 1970, but imports of around 5,000 tons were needed to meet domestic demand.

A great deal of research has been done on developing more productive bean varieties and varieties that are resistant to disease and insects. In the past, El Salvador has had to import one-third to almost half of its pulse needs, of which Honduras supplied by far the greater part.

Rice is grown in practically all sections of the country, but the largest part of the crop comes from the Pacific coastal areas of La Paz, Usulutan, and San Miguel. Most of the crop is upland rice which is produced during the June to November rainy season. More areas using controlled flooding are being added and mechanization is common in both types of operation.

Production has been stimulated by favorable world and domestic prices, availability of good land recently released from cotton production, use of more productive varieties, and increased use of fertilizers. The area in rice in 1967 was double the 1960-64 average of 14,000 hectares, but it dropped to 27,000 hectares in 1968. Yield and production reached record levels in 1968 but dropped sharply in 1969 and again in 1970.

Markets for Salvadoran rice dried up as a surplus developed in other Central American countries. Stocks accumulated from previous large Salvadoran crops and a large proportion of broken grains lowered the value and contributed to problems in marketing locally and in the CACM.

At present, most of these problems remain, indicating that any expansion in production in the next few years is unlikely.

Grain sorghum area averaged 100,000 hectares in 1960-64 and increased to 114,000 in 1969. Output averaged 96,000 tons in 1960-64 and rose to 128,000 tons in 1969. Estimated area and production in 1970 were 113,000 hectares and 130,000 tons.

About 10,000 tons of this grain are used in mixed feed and a like amount, for direct animal feeding. The rest is used for human consumption. Since sorghum is largely interplanted with corn, any increase in corn area will indicate some increase in area planted to sorghum, with a corresponding increase in production.

Fruits and vegetables are grown and consumed throughout the country. Some of these are bananas, citrus, pineapples, mangos, avocados, melons, yuca, potatoes, onions, tomatoes, cabbage, and sweet peppers.

Increased output of some of these fruits and vegetables is projected in the Five-Year Plan. Import substitution is the immediate objective and it is hoped that there will be an exportable surplus of some--tomatoes, melons, mangos, and avocados, for instance. High production costs, as in the case of onions, would be a limiting factor.

Henequen and kenaf are used locally to make bags for coffee, rope and twine, and various handicraft articles. Any surplus is exported--as in 1968 when 165 tons of henequen and 543 tons of kenaf were exported. All exports were to the CACM; Guatemala was the chief market. The Five-Year Plan projects no increase in output of either fiber because of competition from synthetics.

The vegetable oil industry uses cottonseed as the principal raw material. Because cottonseed supplies were down in several recent years, attempts were made, with little success, to cultivate alternate sources of supply. Peanuts, safflower, and soybeans were planted in 1969, but results were commercially a failure.

Sesame output apparently is increasing. The whole crop is exported, and shipments rose from an average of 1,228 tons in 1960-64 to 4,846 tons in 1967, declining slightly to 4,742 tons in 1968. The Five-Year Plan projects an uptrend in production through 1972.

Tobacco is grown under contract with a local cigarette company. Production remains near 1,000 tons and little change is expected. Flue-cured tobacco is imported from the United States to be used for blending with local tobacco for cigarettes. Much larger quantities of dark Honduran tobacco are imported for making cigars.

Balsam is the sap of trees that grow along a 40-mile stretch of coast from Acajutla to La Libertad. The sap is used as a base for perfume and is valuable in medicine for both internal and external use. Some balsam is still exported despite competition from synthetics. Exports in 1968 amounted to 152 tons valued at $394,000.

El Salvador has no actual nor potential lumber production, and imports of most of its forest product needs, mainly from Honduras and Guatemala. The Government has initiated a reforestation program, but considerable effort and a coordinated conservation policy are needed (2).

Livestock and Products

Cattle and hogs are the predominant types of livestock in El Salvador. Estimated cattle and hog populations are shown in table 8.

Most cattle, with the exception of those in a few herds, are of native breeds. In 1963, the U.S. Government and El Salvador signed a Livestock Improvement Loan agreement under which registered animals were purchased in the United States and sold to qualified Salvadoran ranchers. The total amount of the loan was $1.9 million, of which $1.1 million was spent for cattle and $0.8 million for improvement of physical facilities. Loanable funds had been spent by 1967 and no loans were made in 1968. Technical assistance was still made available and credit became available from the Central Bank's development fund, established in late 1966.

In 1969, the Legislative Assembly passed a law effective early in 1970, under which the Ministry of Agriculture is responsible for preslaughter inspection of animals and maintenance of sanitary conditions in slaughterhouses. The Ministry of Health is responsible for sanitary handling of meat for domestic consumption.

El Salvador is a net exporter of live cattle. The animals are imported from Honduras and Nicaragua and exported to Guatemala along with significant numbers of local cattle. Prices in Guatemala are generally better than in local markets. From time to time, cattle exports are prohibited when a shortage of meat threatens.

There are no import duties or quantitative restrictions on imports of purebred cattle. An import permit is required, but it is readily granted by the Ministry of Agriculture.

Until a hog improvement program got underway early in 1966 there was a lack of interest among Salvadoran farmers in producing hogs. Under the program, about 45 commercial hog operations were established and some of these are doing their own slaughtering and marketing.

Statistics on milk production in El Salvador are questionable. The Agricultural Development Plan, in a series of data going back to 1961, shows that milk cow numbers averaged 256,000 head in 1961-64, daily production averaged 2.65 liters (6.02 lbs.), and the average lactation period was 248 days. Annual production per cow averaged 657.2 liters (1,492 lbs.) and total production amounted to 172,000 tons. By 1969, according to the Plan, total production reached 251,000 tons.

A comparison with USDA/ERS figures, compiled largely from attache reports, shows average production in 1961-64 at 226,000 tons and 1969 production at 280,000 tons. The Revista Mensual of the Central Bank in its section on agricultural statistics shows milk output for the same (1961-64) period as 137,000 tons and for 1969, 166,000 tons.

TRADE IN AGRICULTURAL PRODUCTS

The value of El Salvador's agricultural imports is small compared with that of many countries. However, industrial development and exports of both agricultural and nonagricultural products have contributed to a 1960-68 rise of 66 percent in imports, making El Salvador a significant market in terms of growth. An extension of this trend would indicate a sizable increase in U.S. agricultural exports to El Salvador.

Exports

Agricultural products still account for a major part of El Salvador's total exports, but the proportion is declining steadily because of the decline in cotton exports and the increasing value of industrial exports. In 1960-64, farm products accounted for 85 percent of the total export value, but by 1968 they were down to 66 percent of the total.

While coffee remains El Salvador's leading export, its importance has declined rather sharply. In 1957, green coffee beans and coffee extracts accounted for 82 percent of exports of all commodities (11). In 1968, the percentage had declined to 44. During these years, output experienced the normal ups and downs of the coffee production cycle, and in some years was subject to the effects of insects and unfavorable weather. Exports likewise fluctuated, but generally the trend was upward.

The decline in the importance of coffee in the export total is accounted for, in part at least, by El Salvador's increasing trade with the CACM, 90 percent of which is in nonagricultural products. However, it is certain that coffee will remain the most important item in El Salvador's world trade for the foreseeable future.

Germany is the leading market for El Salvador's coffee, taking $40.8 million in 1968, compared with $25.7 million exported to the United States. In 1968, the Communist bloc took coffee valued at $11.8 million from El Salvador.

Japan has been the best market for El Salvador's cotton fiber since 1955. Although exports to Japan have declined, that country still takes more than 90 percent of El Salvador's cotton. Other important markets are Taiwan, Great Britain, Hong Kong, and Italy. Small quantities of cotton linters are exported to the United States. Domestic consumption should remain near the 12,000-ton level.

Sugar is third in importance among Salvadoran agricultural exports and reached $9 million in 1968. The United States became a major market for Salvadoran sugar in 1960, and in the years since, increasing amounts have been shipped to this country. Other important markets in 1968 were Belgium-Luxembourg, Canada, Honduras, and the Canal Zone.

Official Government policy offers no discouragement to sugar production and increased acreage in sugarcane indicates that the industry is gearing up for larger U.S. quotas. Domestic consumption is rising rapidly (6 percent per year) and is estimated at 73,000 tons in 1971. With reasonably good weather, El Salvador should have ample supplies of sugar for the immediate future.

These three agricultural commodities and the byproducts resulting from their processing (soluble coffee and cottonseed oil, for example) constitute the bulk of El Salvador's agricultural export total. Some of the other products are cattle, hogs, eggs, honey, grains, beans, fruits, vegetables, sesame seed and oil, and raw tobacco. The CACM takes most of these products--except honey (West Germany and United States), sesame seed (United States, Italy, and Nicaragua), and sesame oil (Low Countries and United States).

In 1968, the CACM was El Salvador's leading market for all commodities. Exports to the CACM totaled $84.9 million; to West Germany, $41.4 million; and to the United States, $41.3 million. While exports to Germany and the United States are almost entirely of agricultural products, those to the CACM include, besides agricultural products, petroleum products, chemical products, and all kinds of manufactured items.

Imports

Farm products made up 15 to 18 percent of total imports in 1960-68 (table 9). Food products account for the major portion of agricultural items imported. Feedstuffs, raw tobacco, and industrial tallow account for most of the rest.

In view of the current population growth rate of 3.4 percent and rising living standards in urban areas, it appears that food imports--except corn--will have to be maintained at current levels for the immediate future.

Among the more important agricultural imports are dairy products, wheat, corn, pulses, fresh and preserved fruits and vegetables, industrial tallow, cottonseed oil, and live animals. In 1968, agricultural imports were valued at $39.3 million out of a total of $213.5 million for all imports. This compares with 1961 agricultural imports of $20.0 million out of a total of $109 million. However, agriculture's percentage share remained the same.

Dairy products totaling $4.8 million were imported in 1968. The Netherlands and Denmark together supplied $3.2 million; the CACM, $1.1 million.

The United States has had the largest share of the wheat market, supplying wheat valued at $3.3 million out of total imports of $3.4 million in 1968. Import data, on a volume basis (value not available) showed that in 1969, the U.S. share dropped to 81 percent. Prospects are for a continuing increase in wheat imports.

Corn imports are supplied by the CACM--mostly Honduras--under terms of the grain protocol of the General Treaty of Economic Integration, which provides that the basic grains cannot be imported into the CACM area until all possible sources of supply within the area are exhausted. However, more often than not the CACM cannot supply sufficient quantities of corn and outside sources are tapped. Mexico usually has corn available for export to its neighbors. If the current upward trend in corn production is maintained, the prospect is for declining imports over the next few years.

Most of the pulses imported are beans, but small quantities of peas, chickpeas, and lentils are also imported. Since pulses are considered a basic grain, the CACM (mostly Honduras) is the main source of supply for El Salvador.

Despite a somewhat more favorable outlook for bean production, some imports are likely to be needed if current consumption is to be maintained. If supplies of other grains are ample, lesser quantities of beans will be needed. Until the situation with Honduras is settled, the supply of beans may be short, since imports from outside the area are costly, when available.

The CACM supplies most of the fruit and vegetable products, cottonseed oil, and live cattle and hogs. The United States supplies the greater part of the industrial tallow, and the CACM the rest.

In 1968, the CACM was the leading source of total merchandise imports, supplying El Salvador $65.2 million worth of all commodities. The United States was second with $61.7 million, followed by Japan ($16.1 million), West Germany ($13.3 million), and Venezuela ($10.4 million).

El Salvador-CACM Relations

El Salvador has been one of the chief forces in promoting the Central American Common Market, and neighboring countries provide a good market for El Salvador's industrial products. Trade among the members increased sharply from $36.9 million in 1961 to $258.3 million in 1968 but dropped to $249.0 million in 1969. In every year since 1961, El Salvador has led in imports and exports except 1969, when the armed conflict with Honduras disrupted trade. Both imports and exports were down that year.

Despite trade losses, El Salvador weathered the crisis, and the trouble with Honduras, instead of being a threat to the country's economic well being, merely slowed down otherwise favorable trends. Some of the factors responsible for this follow.

Record agricultural production in 1969 provided employment and generated consumer demand at a time when local businesses were pushing domestic sales. Despite the loss of the Honduran market, industrial production was maintained by sales campaigns directed toward the other Common Market countries as well as the domestic market.

Increased tax receipts from coffee exports and from significant increases in the collection of other taxes financed a supplemental 1970 Government investment budget. Future investments in projects requiring a large labor input are to be financed from a recently revised and increased sales/excise tax. These projects are likely to include land reclamation and road construction.

Among negative aspects of the conflict with Honduras, most of which remain, were increased costs and prices, labor unrest, and investor hesitancy.

In addition to the El Salvador-Honduras confrontation, there have been, in recent years, instances of actions and counteractions being taken by certain of the Common Market countries that were against the provisions of the General Treaty of Economic Integration. These circumstances have led the various administrative organizations to set about trying to restructure the Common Market to prevent its total disintegration and to provide for more equitable distribution of the benefits of membership. At this time, no conclusive agreements have been signed.

U.S. AGRICULTURAL TRADE WITH EL SALVADOR

Although El Salvador is a small country and its agriculture is limited to a few y important crops, it supplies nearly 1 percent of the agricultural commodities ted by the United States. It is usually in second place among Central American iers of coffee beans to the United States--after Guatemala. In 1967, it was in place, supplying 51,526 metric tons valued at $40 million, compared with 42,185 valued at $34 million from Guatemala. Sugar imports from El Salvador are grow- having increased from $1.7 million in 1960-64 to a high of $8 million in 1968.

Farm products made up 88 percent of total U.S. imports from El Salvador in 1960-64; rose to 92 percent in 1965 but dropped to 86 percent in 1970 (table 10). In ion to coffee beans and crude sugar, the United States imports soluble coffee, e seed, cotton linters, and miscellaneous crude animal and vegetable products.

U.S. exports of agricultural commodities increased from a 1960-64 average value .4 million to $11.5 million in 1970. For 1960-64, U.S. exports under Government ams averaged 16 percent of the agricultural total. During the latter part of the 's, exports under programs ranged from 24 percent of the total in 1965 to 10 per- in 1968.

The chief U.S. agricultural products exported to El Salvador are dairy products, t, animal feed, soybeans, animal and vegetable fats and oils, and miscellaneous preparations. In 1968, most of the dairy products and vegetable oils and some l products were donations shipped under Government aid programs.

For the immediate future, the United States will probably continue as a large lier of nonfat dry milk through relief agencies and of animal feed concentrates industrial tallow through regular commercial channels. The latter commodity is largest component of the animal and vegetable fats and oils category. The United es exported 5,600 tons valued at $0.9 million to El Salvador in 1960-64. In 1969, amount (11,000 tons) had almost doubled and the value ($1,840,000) had more than led. The prospects are that this trend will be maintained.

The trend in U.S. exports of wheat to El Salvador has been steadily upward except a 4-percent drop in 1967. The value of these exports averaged $1.3 million in -64, rose to $2.9 million in 1966, dropped in 1967, and rose again in 1968, 1969, 1970 to $3.5 million, $3.7 million and $4.3 million, respectively. In line with rising urban standard of living, local consumption of wheat should continue to ex- and it is likely that the major part of it will come from the United States. In 10-year period 1960-69, no other country except Canada supplied an amount of wheat l Salvador approaching that supplied by the United States.

BIBLIOGRAPHY

(1) Anexo al Boletin Meteorologico de El Salvador, 1959. Ministerio de Defensa, Servicio Meteorologico Nacional.

(2) Basic Data on the Economy of El Salvador. Bur. Internatl. Commerce, U.S. Dept. of Commerce. Dec. 1967.

(3) Central American Transportation Study 1964-65; Vol. I. Transportation Consultants, Inc. Washington, D.C. 1965.

(4) Inventory of Information Basic to the Planning of Agricultural Development in Latin America--Central America. Pan American Union.

(5) Program of Agricultural Colonization and Settlement in Central America. Clarence W. Minkel, Mich. State Univ. Apr. 1967.

(6) Cotton in Central America--U.S. Dept. Agr., Foreign Agr. Serv., FAS-M 154. Rev. Aug. 1970.

(7) Ministerio de Agricultura y Ganaderia. Anuario de Estadisticas Continuas, 1967-68.

(8) The World Food Budget, 1970. U.S. Dept. Agr. Foreign Agr. Econ. Rpt. No. 19. Oct. 1964.

(9) The Sugar Industry of El Salvador--Its Capacity to Export. The Sugar Association of El Salvador Mar. 1964.

(10) Plan Quinquenal de Desarrollo Agropecuario, 1968-72. Anexos Metodologicos.

(11) El Salvador--Its Agriculture and Trade. U.S. Dept. Agr. ERS-Foreign 49. June 1963.

Table 1.--El Salvador: Number of farms and utilization of agricultural land, 1950 and 1961

	Unit	1950	1961
Total area of country.	Sq. km.	21,393	21,393
Total area in farmholdings	Sq. km. 1,000 ha.	15,303 1,530.3	15,814 1,581.4
Number of farms.	No.	174,204	226,896
Average size of farm	Ha.	8.8	7.0
Annual crops and fallow.	1,000 ha.	391.1	493.5
Tree crops	1,000 ha.	153.2	159.7
Improved pastures.	1,000 ha.	174.9	104.4
Mountains and forests.	1,000 ha.	205.5	229.2
Other (including natural pastures) .	1,000 ha.	605.6	594.6

Sources: Pan American Union, Organization of American States, America en Cifras, 1963, vol. III, part I. Ministerio de Economia, Direccion General de Estadistica y Censos. Segundo Censo Agropecuario, 1961.

Table 2.--El Salvador: Population, gross national product, and origin of gross domestic product, by economic sector, 1960-69

Item	Unit	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Population.	Thou.	2,454	2,537	2,623	2,712	2,804	2,899	2,998	3,100	3,205	3,314
GNP	Mil. dol. 1/	564	575	642	678	741	790	837	879	906	945
Per capita GNP.	Dol.	230	227	245	250	264	273	279	284	283	285
Origin of GDP by sector:											
Agriculture, forestry, and fishing	Pct.	31.6	32.3	33.5	30.9	30.5	29.1	27.2	26.5	n.a.	n.a.
Mining.	"	.1	.1	.1	.2	.1	.2	.1	.1	"	"
Manufacturing	"	14.6	15.4	15.0	15.8	16.4	17.7	18.8	19.5	"	"
Construction.	"	3.3	3.3	2.5	2.8	3.1	3.1	3.6	3.2	"	"
Transportation, storage, and communication	"	4.6	4.8	4.7	4.5	4.6	4.5	4.3	4.3	"	"
Trade and finance	"	23.4	22.4	23.4	25.3	25.8	25.9	26.0	26.2	"	"
Public administration, defense, and other. . . .	"	22.4	21.7	20.8	20.5	19.5	19.5	20.0	20.2	"	"
Total.		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	"	"

1/ At current prices.

Sources: Population data from Agency for International Development. GNP from International Financial Statistics, IMF. Remaining data from Yearbook of National Accounts Statistics, 1968, vol. I, Individual Country Data, Dept. Econ. and Social Affairs, Statistical Office of the United Nations, United Nations, N.Y., 1968.

Table 3.--El Salvador: Consumption of fertilizer, nutrient equivalent, selected years

Years	Consumption			Total nutrient consumption
	N	P_2O_5	K_2O	
	Metric tons			
1954/55	3,472	1,875	1,845	7,192
1955/56	6,179	3,099	4,034	13,312
1958/59	9,954	3,634	4,794	18,382
1960/61	11,843	4,143	4,764	20,750
1961/62	12,064	3,843	4,704	20,611
1962/63	16,527	4,682	5,185	26,394
1963/64	29,413	8,098	8,332	45,843
1964/65	28,775	9,575	11,706	50,056
1965/66	19,608	8,279	4,825	32,712
1966/67	26,905	11,427	6,823	45,155
1967/68	28,000	12,700	3,600	44,600
1968/69	34,000	16,500	7,000	57,500
1969/70	35,000	16,500	10,000	61,500

Sources: Food and Agriculture Organization (FAO) of the United Nations, Fertilizers, an annual review of world production, consumption, and trade. FAO Production Yearbook, 1969. FAO Monthly Bulletin of Agricultural Economics and Statistics, Feb. 1971.

Table 4.--El Salvador: Per capita food consumption, selected years

Quantity of food and year	Cereals and starches	Sugar	Pulses, nuts, & seeds	Vegetables	Fruits	Meat, eggs, and fish	Milk	Fats and oils (fat content)	Total
Grams per day:									
1961-62.	322	61	39	19	71	42	134	22	--
1963-65.	374	77	33	20	71	39	148	17	--
1966	334	78	22	19	71	34	135	14	--
Calories per day:									
1961-62.	1,119	236	134	4	35	96	73	193	1,890
1963-65.	1,302	297	112	4	35	85	76	154	2,060
1966	1,162	300	74	4	35	72	72	124	1,840
Protein (grams per day):									
1961-62.	30.2	0.2	8.7	0.2	0.4	5.8	4.6	0.1	50.2
1963-65.	35.1	0.2	7.3	0.3	0.4	5.3	5.1	--	53.7
1966	29.1	0.2	4.8	0.3	0.4	4.7	4.7	--	44.2
Fat (grams per day)									
1961-62.	11.4	--	0.7	--	0.3	7.6	3.2	21.8	45.0
1963-65.	13.5	--	0.5	--	0.3	6.8	3.2	17.3	41.6
1966	11.9	--	0.4	--	0.3	6.0	3.1	14.0	35.7

Source: Food and Agriculture Organization of the United Nations, Production Yearbook, 1969.

Table 5.--El Salvador: Indexes of total agricultural and food production, 1961-65 average, annual 1961-70

Indexes of production	Average, 1961-65	1961	1962	1963	1964	1965	1966	1967	1968	1969	Prelim. 1970
Crops.	100	91	96	107	111	94	99	109	104	116	110
Total agriculture. . .	100	93	97	106	109	96	101	109	104	115	110
Total food	100	88	103	104	101	105	116	116	126	121	134
Per capita agriculture	100	99	100	106	105	90	91	95	88	94	87
Per capita food. . . .	100	94	106	104	98	98	105	101	107	99	106
Index of population:											
1963 pop. = 2,712,000	100.0	93.5	96.7	100.0	103.4	106.9	110.5	114.3	118.2	122.2	126.4

Source: U.S. Department of Agriculture, Indices of Agricultural Production for the Western Hemisphere, ERS-Foreign 264, Rev. Apr. 1971.

Table 6.--El Salvador: Area harvested, production, and yield of principal crops, 1960-64 average, annual 1965-70

Years	Area harvested							
	Coffee	Cotton	Sugar-cane	Cent. sugar	Corn	Rice	Beans	Grain sorghum
	1,000 hectares							
1960-64 average	1/125	87	9	--	182	14	27	100
1965.	2/142	82	12	--	193	13	24	111
1966.	2/142	49	15	--	208	20	26	108
1967.	2/142	40	15	--	192	28	28	104
1968.	2/142	51	17	--	200	27	32	114
1969.	2/142	49	17	--	194	22	33	114
1970.	2/142	63	15	--	200	27	36	113
	Production							
	1,000 metric tons							
1960-64 average	109	64	619	65	187	29	13	96
1965.	109	51	948	99	203	32	17	106
1966.	118	39	1,190	111	266	47	15	115
1967.	144	35	1,165	125	209	72	17	108
1968.	114	45	1,328	135	258	74	21	124
1969.	150	45	1,039	109	279	33	26	128
1970.	120	54	1,142	117	330	36	30	130
	Yield per hectare							
	Kilograms 3/							
1960-64 average	--	736	69	--	1,027	2,071	481	950
1965.	768	622	79	--	1,052	2,615	708	955
1966.	831	796	79	--	1,279	2,450	577	1,065
1967.	1,014	875	78	--	1,086	2,571	607	1,038
1968.	803	882	78	--	1,290	2,741	656	1,088
1969.	972	918	61	--	1,438	1,500	788	1,123
1970.	845	857	76	--	1,650	1,333	833	1,150

1/ Food and Agriculture Organization of the United Nations, Production Yearbook; data for 1963 only.

2/ Plan Quinquenal de Desarrollo Agropecuario, 1968-72, Ministerio de Agricultura.

3/ Except sugarcane, which is in metric tons.

Sources: U.S. Department of Agriculture, Indices of Agricultural Production for the Western Hemisphere, ERS-Foreign 264, 1970. Sugarcane acreage and production from Foreign Agricultural Service, USDA, and attache reports; grain acreage from Foreign Agricultural Service.

Table 7.--El Salvador: Exports of principal agricultural commodities, 1960-64 average, annual 1965-68

SITC No. 1/	Commodity	Quantity 2/					Value				
		1960-64	1965	1966	1967	1968	1960-64	1965	1966	1967	1968
							1,000 dollars				
001-01	Cattle	19,930	8,439	19,236	20,765	9,935	825	336	1,102	3,467	407
001-03	Hogs	4,051	6,124	3,339	1,872	288	88	194	137	88	66
025	Eggs	576	552	393	1,093	1,961	273	232	206	602	1,143
026	Honey	911	896	1,138	933	1,243	239	224	260	193	231
042	Milled rice 3/	1,515	3,037	6,789	13,608	23,214	279	547	1,262	2,512	4,072
044	Corn	3,304	174	2,929	8,401	265	174	14	244	731	30
045-09-02	Grain sorghum	1,046	1	939	6,845	807	60	5/	44	400	41
051-01-00	Oranges and mandarins	453	4,390	2,839	6,329	6,110	33	202	131	294	198
051-03-02	Plantains	965	121	1	8	3	66	3	5/	1	5/
051-06-01	Avocados	624	371	889	694	960	28	17	28	37	49
054-01-00	Potatoes, including seed	1,344	1,361	1,088	479	477	123	79	72	46	36
054-02-01	Beans	306	1,104	1,737	2,998	910	50	193	335	655	199
061	Crude sugar 4/	15,962	14,300	50,598	31,244	80,624	2,018	1,879	7,395	4,332	9,081
071-01-03	Coffee beans	94,454	99,864	96,987	121,492	118,180	75,767	95,553	89,029	97,093	92,186
071-03-00	Coffee extract	558	324	525	833	766	1,632	525	936	1,697	1,360
081-03-01	Cottonseed cake and meal	26,268	37,581	32,294	20,749	23,662	1,783	2,886	2,474	1,509	1,480
091-01-00	Margarine	707	1,377	1,212	1,216	1,321	431	803	761	815	879
091-02-02	Edible vegetable fat	1,332	2,119	2,512	2,373	2,220	583	858	1,047	1,048	948
121-01-00	Raw tobacco	17	1	1	173	178	9	5/	2	184	84
221-06-00	Cottonseed	7,679	4,575	3,102	141	298	486	194	214	17	29
221-09-01	Sesame seed	1,228	1,273	2,203	4,846	4,742	287	253	450	1,139	1,014
263-01-02	Raw cotton	50,747	68,089	39,425	27,952	22,162	28,359	37,345	23,807	16,232	13,626
263-03-00	Cotton waste	5,119	5,024	6,240	4,687	6,106	463	452	546	707	901
412-03-00	Cottonseed oil	3,020	3,962	2,687	2,301	2,714	1,007	1,233	1,000	900	1,023
	Other agricultural products						4,637	6,578	10,518	6,601	9,717
	Total agricultural exports						119,700	150,600	142,000	141,300	138,800
	Total exports, all commodities						140,820	188,708	188,930	207,232	211,706
							Percent	Percent	Percent	Percent	Percent
	Agricultural exports as percentage of total exports						85	82	75	68	66

1/ Standard International Trade Classification number. 2/ Metric tons, except cattle and hogs which are number of head. 3/ Includes rough rice, milled at 70 percent. 4/ Includes refined, crude basis. 5/ Less than $500.

Sources: Ministerio de Economia, Direccion General de Estadistica y Censos. Anuario Estadistico Comercio Exterior, vols. I and II. Agricultural totals from Food and Agriculture Organization of the United Nations Trade Yearbook.

Table 8.--El Salvador: Livestock numbers 1/ and production of selected livestock products, 1961-70

Years	Number			Production		
	Total cattle	Hogs	Milk cows	Beef	Pork	Milk
	1,000 head			1,000 metric tons		
1961	1,140	385	253	21	17	162
1962	1,163	345	254	21	15	168
1963	1,194	409	255	21	15	176
1964	1,225	423	258	21	12	184
1965	1,271	406	261	21	12	194
1966	1,322	380	265	22	13	203
1967	1,330	391	273	21	13	216
1968	1,371	394	280	21	13	236
1969	1,410	397	288	21	12	251
1970	1,450	400	298	23	11	268

1/ Estimated except for 1961 census data.

Sources: Plan Quinquenal de Desarrollo Agropecuario, 1968-72, Indices of Production for Beef and Pork, Apr. 1971.

Table 9.--El Salvador: Imports of agricultural commodities, 1960-64 average, annual 1965-68

SITC No. 1/	Commodity	Quantity 2/					Value				
		1960-64	1965	1966	1967	1968	1960-64	1965	1966	1967	1968
							1,000 dollars				
001-01	Cattle	12,679	3,426	1,256	2,387	2,134	708	402	174	224	185
001-03	Hogs	52,295	34,879	36,997	29,012	29,597	1,426	1,146	1,242	881	932
011 thru 013-09-02	Meat and meat preparations	3/	3/	3/	3/	3/	379	426	575	640	895
022-02	Dried milk	3,695	4,224	5,512	4,592	4,425	2,290	2,984	3,889	3,128	3,083
021-029 4/	Other dairy products	3/	3/	3/	3/	3/	968	1,037	1,209	1,436	1,743
041-01	Wheat	29,764	48,380	44,230	54,042	48,835	2,350	3,538	3,229	4,207	3,429
042	Rice, milled 5/	2,703	1,773	6,129	2,063	1,356	427	284	1,010	340	201
044	Corn	25,376	58,500	62,155	14,543	46,829	2,044	5,472	4,836	1,324	3,622
045-09-02	Grain sorghum	1,326	5,404	2,619	88	1,182	73	484	160	6	76
046-01-01	Wheat flour	7,813	979	242	475	889	943	119	33	63	108
048-02	Malt	1,811	1,714	1,575	1,819	1,667	278	281	244	279	245
6/	Other grains & preparations	3/	3/	3/	3/	3/	391	1,015	823	964	1,161
051-053-04-03	Fruits & nuts, fresh & preps.	3/	3/	3/	3/	3/	1,527	1,827	2,579	2,666	2,863
054-01-00	Potatoes, including seed	3,671	2,659	2,662	4,575	5,485	346	165	309	398	464
054-02-01	Beans	13,611	17,216	13,496	14,481	15,493	1,969	2,876	2,153	2,588	2,968
054-055-04-04 7/	Other vegetables & preps.	3/	3/	3/	3/	3/	1,056	956	1,181	1,392	1,901
061-03	Inedible molasses	7,307	1,535	529	2,485	6,996	114	22	8	34	106
072-01	Cocoa beans	369	568	393	403	387	204	226	159	184	173
081-03	Oilseed cake and meal	1,145	799	5,233	8,395	8,097	118	78	557	846	826
081-09-01	Feed concentrates	1,373	1,958	2,739	1,864	1,528	244	341	467	361	305
091-02-01	Hog lard	859	198	177	182	310	243	87	85	94	135
091-02-02	Lard substitutes & other edible fats	489	373	2,127	2,418	1,377	239	164	866	1,042	538
121-01	Raw tobacco	1,682	1,592	1,452	1,842	1,558	826	541	541	624	532
411-02-02	Industrial tallow	5,851	7,378	8,335	9,195	10,485	1,056	1,676	1,875	1,690	1,611
412-03-00	Cottonseed oil	1,027	1,380	6,885	4,628	6,521	204	280	2,175	1,337	1,997
	Other agricultural imports	3/	3/	3/	3/	3/	3,197	6,073	7,021	7,152	8,955
	Total agricultural imports	3/	3/	3/	3/	3/	23,620	32,500	37,400	33,900	39,300
	Total imports, all commodities	3/	3/	3/	3/	3/	139,740	200,559	220,004	223,927	213,514
							Percent	Percent	Percent	Percent	Percent
	Agricultural imports, as percentage of total imports	3/	3/	3/	3/	3/	17	16	17	15	18

1/ Standard International Trade Classification number. 2/ Metric tons, except cattle and hogs which are number of head (from despatches). 3/ Not applicable. 4/ Except 022-02, 025 and 026. 5/ Includes rough rice, converted at 70 percent. 6/ All commodities in Division 04 except those shown separately above. 7/ Except 054-01-00 and 054-02-01.

Sources: El Salvador, Ministerio de Economia, Direccion General de Estadistica y Censos, Anuario Estadistico Comercio Exterior, vols. I & II. Agricultural total from Trade Yearbooks of the United Nations.

Table 10.--United States: Value of agricultural trade with El Salvador, 1960-64 average, annual 1965-70

SITC No. 1/	Commodity	Exports							Imports						
		1960-64	1965	1966	1967	1968	1969	1970	1960-64	1965	1966	1967	1968	1969	1970
		1,000 dollars							1,000 dollars						
	Total trade	46,608	60,261	68,930	59,863	60,593	57,915	63,977	39,286	48,157	44,273	53,713	44,508	40,729	48,300
	Food & agricultural products	6,446	7,916	9,228	7,696	8,300	9,549	11,453	34,397	44,269	38,238	47,604	39,393	34,625	41,441
00	Live animals	246	710	427	164	142	110	342	0	0	0	0	0	0	0
01	Meat and preparations	188	96	51	50	45	24	46	0	19	21	0	8	0	0
02	Dairy products and eggs	419	1,051	681	745	674	1,142	1,434	2/	0	0	0	20	40	62
04	Cereals and preparations	2,732	2,942	4,652	3,826	4,161	4,248	4,776	0	0	3	0	0	0	0
041	Wheat	1,289	1,640	2,939	2,821	3,489	3,661	4,257							
042	Rice	183	201	704	176	8	7	0							
046	Wheat flour	518	281	248	214	232	124	161							
05	Fruits, vegetables & prep.	335	182	206	184	177	121	303	78	23	34	131	14	11	56
06	Sugar and honey	158	202	192	184	138	92	63	1,775	2,544	5,554	4,955	9,187	4,722	6,829
07	Coffee, cocoa, tea, spices	37	20	29	18	48	34	89	31,976	40,986	32,003	41,494	29,237	29,158	33,955
08	Animal feed	514	835	787	851	905	531	468	0	0	0	0	0	0	0
09	Miscellaneous food prep.	426	194	179	140	225	260	215	0	0	0	0	0	0	1
11	Beverages	11	7	12	12	17	26	56	0	0	3	9	0	0	0
121	Raw tobacco	249	34	38	21	24	9	11	0	0	0	0	32	0	0
21	Hides and skins	53	111	0	0	0	0	0	0	0	0	0	0	0	0
22	Oilseeds	19	12	4	21	13	490	530	222	109	34	595	506	321	169
231	Natural rubber	0	2	7	2	1	2	0	0	0	0	0	0	0	0
261-265	Natural fibers	26	7	7	7	3	230	486	250	213	206	146	129	114	58
29	Animal & vegetable materials, n.e.s. crude	106	73	86	80	80	142	124	83	362	363	252	232	223	302
411-422	Animal fats & vegetable oils	928	1,438	1,870	1,391	1,647	2,088	2,510	12	13	17	22	28	36	9

1/ Standard International Trade Classification Number.

2/ Less than $500.

Sources: U.S. Dept. of Commerce, FT 410, United States Exports of Domestic and Foreign Merchandise. FT 420, U.S. Exports--Country by Commodity Groupings. FT 110, United States Imports of Merchandise for Consumption. FT 125, U.S. Imports of Merchandise for Consumption. FT 155, U.S. General Imports. FT 246, U.S. Imports for Consumption.

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